Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

**Genetic Counselor Project**

**Background:**

Genetic counselors are individuals who are trained in the field of genetics. The genetics counseling community ascribes to a belief in non-directive counseling. That is, they feel that it is their duty to provide all of the information that is available and desired by a family so that they can make the decisions that are appropriate for them based on their cultural, moral, religious and other beliefs.

**Scenario:**

A couple is thinking of having a baby, they want to know the risk of having a baby with a genetic disorder.

Check out: http://learn.genetics.utah.edu/content/disorders/singlegene/

**Task:** In groups of three (one group of four)…

You will prepare an informational “story book” about a disorder to present to the family (your classmates). Your investigation should include medical information important for people with this condition so that they can live a healthy and prolonged life. You will present this information to the class. At least one person in the group will act as the genetic counselor (there can be two counselors or a counselor and a doctor) and at least one person will be the parent (you can have both parents present).

In the information booklet, please include the following:

* Family history/Pedigree
  + Create a scenario for the two parents. Do they have the disorder? Did their parents?
  + Create a family tree (3 generations) to show how the disorder was passed down
* Description of the genetic condition
  + What is the condition?
  + What causes the condition?
  + Testing? How can someone know if they have this disorder? Is prenatal testing available?
  + What are the symptoms? At what age do the symptoms appear?
* Punnett Square
  + What are the chances the children of these parents will have the disorder?
* Treatments
  + Will someone with the disorder live a “normal” life?
  + What adjustments/accommodations must be made for someone with this disorder?
* Current research
  + What potential treatments or cures are being worked on?
* Sources

The booklet should be types and printed. Punnett squares and pedigrees may be drawn but must done so very neatly.

**Two grades:**

One for information (booklet) given to parent(s); One for presentation/meeting between counselor and parent.

**Genetic Booklet Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Beginning (F) | Developing (C-D) | Accomplished (B) | Exemplary (A) | Score |
| Information | Little to no information | Some necessary information included but may include unnecessary info | All necessary information included but may include unnecessary info | All necessary information included in concise manner and may include other additional interesting info |  |
| Accuracy | Little to no accuracy | Some information was scientifically accurate | All information was scientifically accurate | All information was scientifically accurate and helped further educate the patient about science |  |
| Clarity | Little to no clarity | Information was somewhat accessible and clear for a people who may not have a strong science background | Information was mostly accessible and clear for a people who may not have a strong science background | Information was accessible and clear for a people who may not have a strong science background |  |
| Aesthetics | Not visually pleasing | The booklet was somewhat visually-pleasing, not cluttered, etc. | The booklet was mostly visually-pleasing, not cluttered, etc. | The booklet was very visually-pleasing, not cluttered, etc. |  |
| Total: | | | | | 4 out of 4 As = 100%  3/4 = 93%  2/4 =87%  1/4 = 83%  All Bs = 80% |